

THE HONORABLE JAMES L. ROBART

UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

IDAHO RIVERS UNITED, et al.,) No. 2:14-cv-01800-JLR
Plaintiffs,)
v.)
UNITED STATES ARMY CORPS OF) DECLARATION OF LTC TIMOTHY
ENGINEERS,) R. VAIL, WALLA WALLA DISTRICT
and) COMMANDER
INLAND PORT NAVIGATION GROUP, et al.,)
Defendants.)

I, Timothy R. Vail, Lieutenant Colonel, United States Army, state and declare as follows:

1. I am the District Commander for the Walla Walla District (District), U.S. Army Corps of Engineers (Corps), headquartered in Walla Walla, Washington. I am assisted by my civilian and military deputies and a work force made up of approximately 800 engineers, scientists, technicians, and special or administrative support staff. The District's civil works boundaries generally follow the Snake River drainage and include approximately 107,000 square miles in

1 six states - Washington, Oregon, Idaho, Wyoming, and small parts of Nevada and Utah. The
2 District has eight multipurpose Civil Works projects in Washington, Oregon and Idaho.
3 Congressionally authorized project purposes (depending on the project) include hydropower,
4 navigation, flood risk management, recreation, incidental irrigation and fish and wildlife
5 conservation. The District is responsible for operating and maintaining the federal navigation
6 channel from McNary Dam on the Columbia River, through the four lower Snake River projects
7 to Lewiston, Idaho. The District is the second largest hydropower producer in the Corps (total
8 generating capacity of 4,413 megawatts). The District is also responsible for regulatory
9 permitting under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors
10 Act, within the State of Idaho and hosts approximately 8 million visitors a year to its lakes and
11 recreational areas (37 recreation areas on approximately 20,000 acres). I base this declaration on
12 personal knowledge and information from my staff.

15 2. The lower Snake River projects (LSRP) are comprised of four congressionally
16 authorized multipurpose Civil Works lock and dam projects in Washington State, located
17 between the confluence of the Columbia and Snake rivers at the Tri-Cities, WA and the
18 confluence of the Snake and Clearwater rivers at Lewiston, ID. The existing authorized project
19 purposes of the LSRP include commercial navigation, hydropower, recreation, fish and wildlife,
20 and incidental irrigation. Additionally, flow conveyance through the Lewiston, ID levees is
21 necessary to support the original Lower Granite Project design and all associated project
22 purposes. The LSRP pools are designed and typically operated within a three to five-foot range
23 with the lowest end of the range designated as the minimum operating pool, or "MOP". There
24 are physical limits as to how much the pool levels can be raised based on design specification for
25 the dams. For example, the operating range of Lower Granite Reservoir is 733 to 738 feet above
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1 mean sea level (msl) and the Corps does not have the authority to raise the pool above 738 msl.

2 Once the pool has been raised to the maximum level, it cannot be raised further.

3 3. Construction of the LSRP was authorized by Congress in Section 2 of the River and
4 Harbor Act of 1945 (Public Law [PL] 79-14). The Flood Control Act of 1962 (PL 87-874)
5 modified the River and Harbor Act of 1945 by specifically requiring the establishment of the
6 navigation channel within the LSRP at 14 feet deep by 250 feet wide at MOP, and provided the
7 Corps with authority to maintain the channel at those dimensions. The commercial navigation
8 industry equipment (barges, etc.) are designed to take advantage of the 14 foot depth at MOP.
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10 All LSRP navigation locks are designed to provide a depth of 15 feet deep at MOP to fully
11 accommodate the 14 foot deep navigation channel. The total tonnage moved on the lower Snake
12 River fluctuates from year to year, depending on crop production, the state of the U.S. economy,
13 and trends in world trade. The five year average tonnage for 2008-2012 by LSRP Dam is
14 2,732,800 tons at Ice Harbor, 2,462,000 tons at Lower Monumental, 2,239,000 tons at Little
15 Goose, and 1,266,440 at Lower Granite. (see FEIS Table 3-14). The majority of the tonnages are
16 grain, petroleum, and wood products.

17 4. Because routine navigation channel maintenance has not occurred since 2005-2006,
18 shoaling in the channel and port berthing areas has become critical in some locations. Sediment
19 has been depositing at the confluence of the Snake and Clearwater rivers, primarily during spring
20 runoff periods. Survey results from 2010 through 2013 show that the total surface area of the
21 federal navigation channel having depths less than 14 feet, as measured at MOP, at the
22 confluence of the Snake and Clearwater rivers increased from about 38 acres in 2010 to about 55
23 acres in 2012, but decreased slightly to 54 acres in 2013. Water depths in the federal navigation
24 channel at the confluence are now as shallow as 7 feet in places, while the berthing areas at the
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1 Ports of Clarkston, Washington and Lewiston, Idaho, which are adjacent to the federal
2 navigation channel, are now as shallow as 7.3 feet and 9.3 feet, respectively (at MOP).
3 Navigation channel depths less than 14 feet can substantially affect commercial navigation and
4 access to adjacent port facilities. Effects to navigation can include an increased risk to vessel
5 safety (grounding/scraping), damage to vessels or cargo, personal injury/death, economic losses
6 and release of harmful cargo/chemicals into the river. The Ports of Lewiston and Clarkston have
7 both reported groundings of vessels over the last five years. In 2012, a barge grounded near the
8 Port of Clarkston and required two tugs to break it free.
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10 5. The Port of Clarkston is a popular port of call for a number of tourism cruise lines.
11 Passengers on these tours visit area cultural/historic sites and can participate in jetboat tours of
12 the Hell's Canyon. Sediment buildup at the Port of Clarkston cruise line dock often forces cruise
13 ships to dock at the Port's crane dock, which is not designed for passenger ships and can only
14 accommodate one vessel at a time. The crane dock is located about a mile downstream of the
15 cruise dock and the Port must bus passengers from the crane dock to the cruise dock to link up
16 with their pre-purchased tours. This results in an inconvenience and potential hazards to the
17 passengers and additional costs for the Port.
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19 6. Sediment accumulation at the confluence of the Snake and Clearwater rivers also
20 interferes with the Corps ability to operate the Lower Granite Project as contemplated under the
21 Reasonable and Prudent Alternative (RPA) Action 5 in the National Oceanic and Atmospheric
22 Administration's 2008 Biological Opinion for the Federal Columbia River Power System, as
23 supplemented in 2010 and 2014 (FCRPS BiOp). RPA Action 5 requires that, from April through
24 approximately September 1 each year, the Corps operate the reservoirs on the LSRP at MOP,
25 unless adjustment is needed to meet authorized project purposes (primarily navigation).
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(Attachment A to this Declaration). Operating at MOP versus full pool (a drop of elevation of 3 to 5 feet) is intended to reduce the cross section of the reservoir, which increases water travel time and aids in juvenile salmonid passage through the reservoir as they migrate downstream.

Under current conditions, however, operating at MOP means that any navigational impairments are exacerbated because the depth between the water surface and bottom sediment is at its lowest. RPA Action 5 allows the reservoir level to be adjusted (i.e., operated at a level above MOP) to meet authorized project purposes, primarily navigation, and the Corps has been implementing a variable MOP operation – operating above MOP – in order to address navigation safety concerns. This deviation from MOP operation, however, impacts the entire reservoir because the Lower Granite pool cannot be raised only at discrete locations. Further, this deviation is intended to be an interim measure for addressing sediment deposition in the navigation channel until effective channel maintenance can be performed and operations can return to the MOP operational range specified in RPA Action 5.

7. Shoaling in the Ice Harbor navigation lock downstream approach is interfering with the ability of barge traffic to safely maneuver when entering or exiting the navigation lock. Spill flows at the dam have scoured rock from the base of the four rock-filled coffer cells (large rock filled cylinders designed to dissipate water flows) bordering the lock approach and have pushed material from the edge of the lock approach into the channel, narrowing the room available for barges to safely maneuver between the coffer cells and the north shore. This material has created a shoal that encroaches across the south half of the lock approach for about 480 feet. The District is aware of two recent scrapings at Ice Harbor by Shaver Transportation Company since October 2014. As a result of the shoaling, commercial vessels are currently required to implement operational changes in order to pass through Ice Harbor Dam. Normal configuration

1 for commercial barges entering the lock is four barges and a tug boat. However, companies are
2 often forced to break apart the configuration so only two barges pass through at a time in order to
3 avoid hazards associated with the shoaling. This adds many hours of transit time per tow and
4 increases transportation costs. Because Ice Harbor is the lowest dam in the LSRP portion of the
5 navigation system, all barges, both upbound and downbound, must pass through the lock,
6 thereby exposing all barges in the LSRP to the shoaling hazard and incurring additional
7 transportation costs. Additionally, in an effort to assist commercial barges/tows in avoiding the
8 shoaling, the Corps engages in a fairly complicated coordination effort with McNary Lock and
9 Dam Project downstream on the Columbia River and the Bonneville Power Administration to
10 maintain a tailrace water depth at Ice Harbor Dam between 13 and 15 feet. This is done in an
11 attempt to ensure that vessels can pass safely, but it does not reduce the need to break apart tows.
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13 8. The Corps proposes to perform maintenance dredging to satisfy the current immediate
14 need to reestablish the congressionally authorized navigation channel dimensions (14 feet deep
15 and 250 feet wide at MOP), with up to one additional foot over-depth, at the downstream
16 navigation lock approach for Ice Harbor Dam and the federal navigation channel at the
17 confluence of the Snake and Clearwater rivers.¹ Dredging is planned to start at the downstream
18 approach to Ice Harbor Dam and then move to the confluence of the Snake and Clearwater
19 Rivers, with frequent trips to the disposal site at River Mile 116. Maps of the planned dredging
20 areas are included as Attachment C to this Declaration. The dredged material will be placed in-
21 water within the Lower Granite Reservoir at River Mile 116 just upstream of Knoxway Canyon
22 to create shallow water habitat, primarily for outmigrating juvenile fall Chinook salmon. All
23 dredging and disposal actions will occur during the in-water work window of December 15 to
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¹ The additional one foot over-depth dredging is standard procedure as outlined in Engineer Regulation
26 1130-2-520 and is permitted because of inaccuracies in the dredging process.
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1 March 1 when salmonids are less likely to be present. It is also important to note that the planned
2 dredging actions in Lower Granite reservoir and the lock approach to Ice Harbor Dam would
3 affect only about 141.5 acres of the approximate total 33, 890 acres (surface area) of the LSRP.
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5 9. The sediment accumulation problem also extends into berthing areas at the ports at
6 Lewiston and Clarkson. Water depths in the berthing areas are currently as shallow as 7.3 feet at
7 MOP. The two port authorities submitted permit application to the Corps under Section 404 of
8 the Clean Water Act and Section 10 of the Rivers and Harbors Act for maintenance dredging in
9 the non-federal port berthing areas. The Corps' Seattle and Walla Walla District offices
10 evaluated the permit applications in *Department of the Army Environmental Assessment and*
11 *Statement of Findings*, both dated November, 13, 2014. (Attachment B to this Declaration).
12 Permits were issued to the Ports on November 14, 2014. Though funded by the Ports, the
13 related/ancillary berthing area maintenance dredging will be completed by the same contractor
14 and during the same work window as the Corps' work in the federal navigation channel, in
15 accordance with 33 C.F.R. § 336.1(b)(7).
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17 10. Dredging did not begin as planned on December 15, 2014. On November 14, 2014
18 the Walla Walla District (District) issued a contract for the planned navigation channel and
19 berthing area maintenance dredging for \$6,745,150.00. On November 17, 2014 an unsuccessful
20 bidder filed an agency-level protest challenging the award of the contact and the District
21 suspended the contract while the Corps considered the merits of the protest. On December 9,
22 2014 the Corps denied the protest. On December 12, 2014, the District issued the contractor a
23 notice to proceed. The contractor has informed the District that it will need approximately 30
24 days to mobilize to the work site. Based upon that information, the District estimates that
25 dredging could begin on or around January 12, 2015. If necessary, the District will instruct the
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1 contractor, when the new contract performance schedule is negotiated, not to begin dredging
2 earlier than January 10, 2015. Dredging cannot, however, be extended into March (outside the
3 winter in-water work window) as an annual navigation lock maintenance outage on the
4 Columbia and Snake rivers is scheduled for March 7 to April 4, 2015. If dredging is enjoined
5 until the 2015/16 winter in-water work window, the Corps will incur additional costs associated
6 with follow-on environmental compliance coordination, contract administration and likely unit
7 cost inflation adjustments (estimated at \$350,000-\$550,000). The Corps will also incur
8 significant contract costs if enjoined after the dredging contractor mobilizes to the work site.
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10 Total contractor mobilization and demobilization costs are currently identified in the contract as
11 upwards of \$2,000,000. Any delay would also continue the safety, commercial navigation and
12 environmental effects described above.

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14 I declare under penalty of perjury that the foregoing is true and correct. Dated this 15th
15 day of December 2014.

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19 LTC Timothy R. Vail
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